

KENTUCKY COUNTY HEALTH PROFILES, 2000

SUMMARY

HEALTH AND SOCIAL INDICATORS

POPULATION: Accurate and reliable population statistics are fundamental to any population-based health status analysis. All population figures used in this report are 2000 Census counts provided by Kentucky Population Research, Urban Studies Institute, University of Louisville, and all population-based rates have been computed using these numbers. These counts were provided in three racial categories: White, Black (African American), and Other (see Technical Notes for change in the definition of Other). Races other than White and Black comprised 2.6 percent of the enumerated population of Kentucky in 2000. Due to limitations of space and the extremely small numbers of the Other population at the county level, statistics disaggregated by race in this report are presented for the White and Black populations only.

Also due to limitations of space, rates for many indicators in this report have not been included. Basic population data have been provided to allow the reader to calculate additional rates as need be.

TOTAL BIRTHS: Birth statistics are extremely important measures of health status as they serve as an indicator of a broad range of nutritional, environmental, and other health-related factors in a population.

Crude birth rate: In 2000, the crude birth rate in Kentucky was 13.8 births per 1,000 population, unchanged since 1998. The rate ranged from 7.2 per 1,000 in Lyon County to 23.5 per 1,000 in Christian County.

Under 18 birth rate: Births to teen mothers are a major public health concern as they are associated with higher rates of low birthweight and infant mortality and create educational, social, and economic problems for both mother and child. In 2000, the under 18 age-specific birth rate in Kentucky was 11.5 births per 1,000 females aged 10-17, down slightly from 12.3 in 1999. The rate ranged from 22.6 per 1,000 in Bracken County to 2.7 per 1,000 in Oldham County. Statewide, 4.5% of all births were to mothers under 18, a decrease from 4.8% in 1999.

Weight less than 2,500 grams: Low birthweight is a major contributing factor in infant mortality and long-term disability. In 2000, 8.3% of children born in

the state weighed less than 2,500 grams (5 lb. 8 oz.), unchanged from the 1999 rate. By county, this percent varied from a high of 15.1% in Clay County to a low of 0.0% in Robertson County.

Mothers without prenatal care, 1st trimester: Early prenatal care is associated with decreased risk of low birthweight and infant mortality. In 2000, 14.4% of Kentucky mothers did not receive prenatal care during the first trimester of pregnancy, unchanged from 1999. This measure ranged from 34.7% in Fulton County to 2.0% in Hancock County.

Unmarried mothers: Unmarried mothers tend to have poorer birth outcomes than married mothers because they are disproportionately young, less educated, and are more likely to be poor. Among the factors related to births to unmarried mothers are higher rates of teenage pregnancy, lack of prenatal care, and low weight births. Statewide, the rate of births to unmarried mothers in 2000 was 310.0 per 1,000 live births, an increase from 303.8 in 1999. Simpson County had the highest rate, at 448.9 per 1,000, and Oldham County had the lowest rate, 164.2 per 1,000.

WHITE BIRTHS: Due to the preponderance of whites in the total population of Kentucky (90.1%), birth indicators for the white population closely mirror the total in both ranking and rates, but tend to be slightly lower.

BLACK BIRTHS: The major indicators of birth outcomes continued to be less favorable for blacks than for the rest of the population, but the gap between blacks and whites narrowed for some indicators. The percent of low birthweight births to black mothers decreased slightly from the previous year, from 14.2 to 13.7. However, the gap between blacks and whites in the under 18 birth rate widened from 20.8 to 11.6 per 1,000 in 1999 to 21.9 to 10.8 in 2000. For the third consecutive year, more than one-fifth (22.1%) of black mothers failed to receive prenatal care during the first trimester (compared to 13.5% for whites). Single-year black birth statistics, in particular, in most Kentucky counties should be used with great caution due to the very small numbers involved.

INFANT MORTALITY: The infant mortality rate is one of the most universal and understandable measures of a population's health status. In 2000 the statewide rate was 6.7 infant deaths per 1,000 live births, the lowest ever recorded in the state. Twenty-eight counties recorded no infant deaths in 2000. Statewide, the infant mortality rate for whites was 6.1 deaths per 1,000 births, and for blacks it was 12.8 per 1,000. One should be particularly careful in using these rates at the county level due to the small numbers involved.

REPORTABLE DISEASE CASES: Despite the significant progress made in the reduction in incidence of infectious diseases in this century, they remain an important cause of illness and death. In addition, surveillance of infectious diseases continues to be of extreme importance in the face of new diseases and newly resistant pathogens which may emerge in the future. This report records the number of cases reported during 2000 of syphilis, pertussis, hepatitis A, hepatitis B, tuberculosis, *Chlamydia trachomatis* infections, animal rabies, and an index of foodborne diseases, the sum of *Salmonella*, *Shigella*, and *Campylobacter* infections.

SOCIOECONOMIC INDICATORS: Economic and social factors have long been associated with health status. Living conditions and health behaviors associated with poverty have such enormous implications for health that they cannot be ignored in any investigation of health status.

Population per primary care provider, 1999: This is an indicator of a population's access to medical care. Statewide, 1999 data indicate that there were 2,100 persons per primary care physician. The counties exhibited wide variation in this ratio. The highest were Robertson and Hancock, which had no primary care physicians, and the lowest was Rowan County, with 1,018 persons per primary care physician. Comparable data for 2000 were not available.

Medicaid eligible, FY 2000 and Medicaid utilizers, unduplicated, FY 2000: These indicators measure medical care coverage by the Medicaid program for the financially and/or medically indigent. In state fiscal year 2000, more than 600,000 people, 14.9% of the population of Kentucky, were eligible for Medicaid services. The average monthly unduplicated number of utilizers, i.e., eligible members having one or more paid claims, was over 580,000 persons, and comprised 14.4% of the population, an increase from 11.2% in 1999. Owsley County ranked highest in Medicaid eligible percent (50.6), and Oldham County ranked lowest (3.7). The highest Medicaid utilizer percent was also in Owsley County (49.5), and the lowest was in Oldham County (3.6).

Food stamp recipients, AFDC (Aid to Families with Dependent Children) recipients, and WIC (Women, Infants, and Children) recipients: These measures present data on the proportions of the population who accessed programs for the indigent. In calendar year 2000, 10.0% of the total population received food stamps, and 8.8% of the eligible population were served by the WIC program. In fiscal year 2000, 3.4% received AFDC benefits. Owsley County ranked highest in both food stamp percent (40.7) and AFDC percent (14.6). Wolfe County was highest in WIC percent (20.3).

Persons in poverty, 1999: Based on 1999 statistics, the most recent available, 14.3% of the population in Kentucky were below the poverty level, a decrease from 15.3% in 1998. Kentucky counties ranged from 33.7% in Owsley County to 5.0% in Oldham County.

Persons < 18 in poverty, 1999: It is estimated that one-fifth (20.2%) of the total population under the age of 18 lived in poverty in 1999, a slight decrease from 21.2% in 1998. Wolfe County topped the list at 44.8%.

Unemployed: Unemployment rates in 2000 ranged from a high of 15.8% in Lewis County to 1.6% in Woodford County. The statewide rate was 4.1%.

Median household income, 1999: According to 1999 statistics, the most recent available, the median household income in Kentucky was \$33,732, down from \$33,955 in 1998. By county, median household income ranged from \$62,752 in Oldham County to \$16,628 in Owsley County.

EDUCATION: Educational attainment is closely related to socioeconomic status and also has implications for health.

Mothers with less than 12 years of education: In 2000, over one in five (21.4%) women giving birth had less than a high school education, a slight improvement over the 1999 percent of 21.7. This measure ranged from 43.7% in Clay County to 6.9% in Oldham County.

Transition rate (1999-2000): This indicator measures the percent of high school graduates who successfully make the transition to employment, military service, or further schooling. Statewide, for the 1999-2000 school year, 95.3% of graduates made the transition successfully. Nine counties recorded 100%. Elliott County had the lowest rate at 76.0%.

Dropout rate (1999-2000): During the 1999-2000 Kentucky school year, 3.5% of students in grades 7-12 dropped out of school. This rate ranged from 7.2% in Breathitt County to 0.6% in Robertson County.

OCCUPATIONAL INJURIES: In 2000, there were 124 fatal occupational injuries in the state, 17 agricultural, and 107 nonagricultural. Agricultural injury fatalities decreased, from 21 in 1999, but nonagricultural injury fatalities increased, from 96.

A complete accounting of occupational injuries other than those resulting in fatality is difficult to obtain in Kentucky. The most complete nonfatal injury data available by county are from Workers' Compensation claims, which do not record all occupational injuries, particularly agricultural. Nevertheless, 40,557 nonfatal occupational injuries were reported in 2000, 511 agricultural and 40,046 nonagricultural, all decreases from the previous year.

ADULT ABUSE: Adult abuse and neglect are important causes of injury and death, and they are increasingly recognized as public health problems. In Kentucky in fiscal year 2001, there were 10,468 substantiated incidents of adult abuse (abuse by someone other than spouse), a rate of 3.4 per 1,000 persons 18 and older, and 12,192 substantiated incidents of spouse abuse, a rate of 4.0 per 1,000.

CHILD ABUSE AND NEGLECT: Statewide in calendar year 2000, there were 4,628 substantiated incidents of child physical abuse, 1,281 of child sexual abuse, and 10,907 of child neglect. These resulted in rates of 4.7, 1.3,

and 11.0 per 1,000 persons under age 18, respectively, all increases from the previous year.

VIOLENT CRIMES: Violence, both domestic and nondomestic, is increasingly recognized as a serious public health problem. Acts of intentional violence are often related to socioeconomic conditions and have major impact on the health of a community. In 2000, 199 homicides occurred in Kentucky, a decrease from 211 in 1999. The numbers of assaults and rapes were down from the previous year, but the number of robberies increased slightly. Data on violent crimes are reported by county of occurrence.

MOTOR VEHICLE CRASHES: Motor vehicle crashes are one of the greatest causes of unintentional injury and death, and affect all age groups. In 2000, there were 810 persons killed and 53,129 persons injured in motor vehicle crashes in Kentucky. The number of fatalities decreased from the 1999 total of 819, and nonfatal injuries decreased as well, from 54,951. Data also indicate that alcohol was a frequently contributing factor, particularly in fatal crashes, in which over a fourth (25.5%) involved drinking drivers. Data on motor vehicle crashes are presented in the health and social indicators table by county of occurrence.

LEADING AND SELECTED CAUSES OF RESIDENT DEATHS

Cause of death statistics have long been among the most ascertainable, readily available, and comparable of all health status indicators for a population. Virtually 100% of deaths are recorded, and causes of death are assigned by established and consistent nosological procedures. Numbers and crude rates for all ages and each of eight age groups, age-adjusted rates (AAR), and years of potential life lost prior to age 75 (YPLL-75) are shown for each leading and selected cause. Explanations of the calculation of age-adjusted rates and YPLL-75 are included in Definitions and Technical Notes in the Appendix. The ten leading causes for the total, white, and black populations, as well as a set of selected causes are presented for each county.

LEADING CAUSES - TOTAL POPULATION: In Kentucky in 2000, there were 38,797 total resident deaths resulting in a crude rate of 959.9 deaths per 100,000 population. The age-adjusted rate (adjusted to the 2000 U.S. standard population) was 980.9 deaths per 100,000, an decrease from 1003.2 in 1999. By county, the age-adjusted rate ranged from 1428.7 per 100,000 in Carroll County to 742.5 in Hickman County.

The top five leading causes of death, diseases of heart, malignant neoplasms, cerebrovascular disease, chronic lower respiratory diseases, and unintentional injuries, accounted for seven of every ten (71.2%) deaths.

Diseases of heart accounted for almost one-third (31.1%) of total deaths, and was the leading cause of death in 2000, as it has been for many years. It was the leading cause in 112 of the state's 120 counties, and also accounted for almost one-fifth (19.6%) of years of potential life lost. The statewide age-adjusted rate was 307.5 deaths per 100,000, down from 319.8 in 1999. The AAR ranged from 519.7 per 100,000 in Crittenden County to 207.8 in Bracken County.

Malignant neoplasms (cancer), the second leading cause, was responsible for nearly a quarter (23.5%) of deaths statewide, and was the leading cause in eight counties. Malignant neoplasms, being more prevalent than heart disease among persons under 65, accounted for 23.5% of total YPLL. The statewide AAR, 226.7 per 100,000, was essentially unchanged from 1999. Elliott County had the highest AAR, 332.4 per 100,000, and Robertson County had the lowest, 126.1.

Cerebrovascular disease (stroke), the third leading cause statewide, was responsible for 6.6% of total deaths, but only 2.9% of YPLL. The statewide AAR was 65.5 per 100,000, down from 72.9 in 1999. The AAR ranged from 171.7 per 100,000 in Carlisle County to 19.4 in Hickman County.

Chronic Lower Respiratory Diseases (CLRD) (previously called chronic obstructive pulmonary diseases, or COPD) includes such diseases as chronic bronchitis, emphysema, and asthma. CLRD was the fourth leading cause of death in Kentucky in 2000, accounting for 5.5% of total deaths. The statewide AAR was 53.5 per 100,000, which was lower than the 1999 rate of 58.6. Among the counties, Bracken had the highest AAR, at 134.2 per 100,000, and Hart County had the lowest at 15.7 per 100,000.

Unintentional injuries, the fifth leading cause, accounted for only 4.5% of total deaths. However, due to their affect on younger as well as older age groups, they were the third greatest cause of years of potential life lost prior to age 75, making up 16.5% of the total. Unintentional injuries were the leading cause of death for ages 1-44. The statewide AAR, 43.8 per 100,000, was essentially unchanged from the 1999 rate of 43.4. The AAR ranged from 113.9 per 100,000 in Leslie County to 15.6 in Boone County.

SELECTED CAUSES - TOTAL POPULATION: The following causes were selected as a result of their being included either in the Assessment Protocol for Excellence in Public Health (APEXPH) core data set or in the Centers for Disease Control's consensus set of health status indicators.

Lung cancer accounted for over one-third (36.2%) of all cancer deaths and was a major cause of death for persons 45 and older in 2000. The statewide age-adjusted rate was 81.4 per 100,000, up from 76.3 in 1999. Martin County had the highest rate at 148.2 per 100,000, and Hickman County had the lowest, 28.1 per 100,000.

Motor vehicle crashes were the greatest single cause of unintentional injuries resulting in death, responsible for almost half (45.5%) of such deaths. In addition, they accounted for 55.7% of all years of potential life lost due to unintentional injuries. The statewide AAR for motor vehicle crash deaths was 19.7 per 100,000, essentially unchanged from 19.4 in 1999. By county, the

AAR ranged from 68.9 per 100,000 in Hart County to 0.0 (four counties had no resident motor vehicle crash fatalities).

Female breast cancer was responsible for approximately one of every seven (14.2%) cancer deaths in women in 2000. The statewide age-adjusted rate was 26.0 deaths per 100,000 female population, slightly less than the 1999 rate of 27.3. Gallatin County had the highest AAR, at 109.7 per 100,000 women. Fourteen counties had no deaths attributable to female breast cancer.

The remaining selected causes, **chronic liver disease and cirrhosis, assault (homicide), congenital malformations, and drug-induced deaths** had relatively low age adjusted rates, but are important indicators for particular age groups and because of their relationships to socioeconomic and lifestyle factors.

LEADING CAUSES - WHITE: As is the case for birth statistics, due to the preponderance of whites in the total population of Kentucky, the leading causes of death for the white population closely mirror the total population in both ranking and rates. However, for most causes of death, white rates tend to be somewhat lower than the population as a whole, e.g., the AAR for all causes was 977.8 per 100,000 for whites compared to 980.9 for the total population.

LEADING CAUSES - BLACK: Age-adjusted rates for most leading causes of death for blacks were greater in 2000 than those for whites. Statewide, the rate for all causes was 1206.4 per 100,000, higher than the rate of 977.8 for whites, and an increase from 1184.4 in 1999. Blacks experienced the same top three leading causes, but their AARs were considerably higher. Diabetes mellitus was the fourth leading cause among blacks, with an age adjusted rate of 52.5 per 100,000, compared to a rate of 25.3 for whites. CLRD dropped from the fourth leading cause in 1999 to the seventh in 2000. The black AAR for CLRD was 36.3 per 100,000, compared to 54.9 for whites. The fifth leading cause was unintentional injuries, with an AAR of 38.8 per 100,000, which was lower than the white rate of 45.2. Assault was again the ninth leading cause of death for blacks. Alzheimer's disease, the seventh leading cause among whites, was not among the top ten causes for blacks. The reader should be particularly cautious in using black rates in many counties since they are based on very small populations.

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